

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled).
2. (Canceled).
3. (Canceled).
4. (Canceled).
5. (Canceled).

6. (New) A method for controlling air conditioning of a vehicle interior as a function of incident solar radiation, comprising steps:

detecting incident solar radiation in different solid angle ranges by a plurality of sensor elements,

determining of an air conditioning capacity of at least two air conditioning ducts of individually controllable air conditioning capacity for the air conditioning of different vehicle interior regions, the air conditioning capacity of an air conditioning duct being determined, in addition to taking into account an actual interior temperature, a desired interior temperature, an outside temperature and, optionally, a vehicle speed, as a function of an output signal from a sensor element assigned to this air conditioning duct or of an averaged output signal from a sensor element assigned to this air conditioning duct,

calculating a sunlight steepness according to the following formula

$$S = ((|A2 - A3| + |A1 - A4|) / 2 * M / \bar{A},$$

S being the sunlight steepness, A2 an output signal from a second sensor element, A3 the output signal from a third sensor element, A1 an output signal from a first sensor element, A4 an output signal from a fourth sensor element, M a multiplier and \bar{A} an arithmetic average value of the output signals A1 to A4 from the first to fourth sensor elements,

determining a correction factor with the aid of the calculated sunlight steepness,

determining a corrected air conditioning capacity by multiplication of the determined air conditioning capacity by the correction factor, and

setting the corrected air conditioning capacity.

7. (New) A method for the air conditioning of a vehicle interior as a function of incidence of solar radiation as claimed in claim 6, wherein the correction factor is determined as a function of the calculated sunlight steepness in a vehicle-dependent manner during measurements.

8. (New) A method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 6, wherein the correction factor is constant below a first threshold value of the sunlight steepness and above a second threshold value of the sunlight steepness, the constant above the second threshold value being higher than the constant below the first threshold value, and the correction factor having a linear profile between the two threshold values.

9. (New) A method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 7, wherein the correction factor is constant below a first threshold value of the sunlight steepness and above a second threshold value of the sunlight steepness, the constant above the second threshold value being higher than the constant below the first threshold value, and the correction factor having a linear profile between the two threshold values.

10. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 6, wherein during the determination of the air conditioning capacity on the basis of the incident solar radiation, the blow-in temperature is lowered and the blower

power is raised, and this raising/lowering is maintained or reduced by means of the correction factor.

11. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 6, wherein during the determination of the air conditioning capacity on the basis of the incident solar radiation, the blow-in temperature is lowered or the blower power is raised, and this raising/lowering is maintained or reduced by means of the correction factor.

12. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 7, wherein during the determination of the air conditioning capacity on the basis of the incident solar radiation, the blow-in temperature is lowered and the blower power is raised, and this raising/lowering is maintained or reduced by means of the correction factor.

13. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 7, wherein during the determination of the air conditioning capacity on the basis of the incident solar radiation, the blow-in temperature is lowered or the blower power is raised, and this raising/lowering is maintained or reduced by means of the correction factor.

14. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 8, wherein during the determination of the air conditioning capacity on the basis of the incident solar radiation, the blow-in temperature is lowered and the blower power is raised, and this raising/lowering is maintained or reduced by means of the correction factor.

15. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 8, wherein during the determination of the air conditioning capacity on the basis of the incident solar radiation, the blow-in temperature is lowered or the blower power is raised, and this raising/lowering is maintained or reduced by means of the correction factor.

16. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 9, wherein during the determination of the air conditioning capacity on the basis of the incident solar radiation, the blow-in temperature is lowered and the blower power is raised, and this raising/lowering is maintained or reduced by means of the correction factor.

17. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 9, wherein during the determination of the air conditioning capacity on the basis of the incident solar radiation, the blow-in temperature is lowered or the blower power is raised, and this raising/lowering is maintained or reduced by means of the correction factor.

18. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 6, wherein the selected multiplier is 50.

19. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 7, wherein the selected multiplier is 50.

20. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 8, wherein the selected multiplier is 50.

21. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 9, wherein the selected multiplier is 50.

22. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 10, wherein the selected multiplier is 50.

23. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 11, wherein the selected multiplier is 50.

24. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 12, wherein the selected multiplier is 50.

20. (New) The method for the air conditioning of a vehicle interior as a function of incident solar radiation as claimed in claim 13, wherein the selected multiplier is 50.